

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

				Complete if Known	
				Application Number	10/502,351
				Filing Date	July 23, 2004
				First Named Inventor	Lian Hui ZHANG et al.
				Group Art Unit	Unknown 1652
				Examiner Name	Unknown IQBAL CHOWDHURY
				Confirmation No.	6085
Sheet	1	of	4	Attorney Docket Number	2977-154

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office <sup>3</sup> Code	Number <sup>4</sup>	Kind <sup>5</sup> (if known)			
AA	AA	PCT	WO 01/98214 A1		NOVOZYMES BIOTECH INC.	12/27/2001	

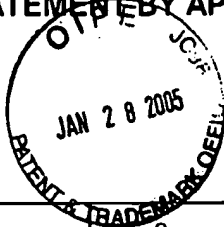
## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
AB	AB	ALLISON et al., "Extracellular products as mediators of the formation and detachment of <i>Pseudomonas fluorescens</i> biofilms," FEMS Microbiol. Lett. 167:179-184, 1998.	
AC	AC	BASSLER, et al., "Cross-species induction of luminescence in the quorum-sensing bacterium <i>Vibrio harveyi</i> ," J. Bacteriol. 179:4043-4045, 1997.	
AD	AD	BECK von BODMAN et al., "Capsular polysaccharide biosynthesis and pathogenicity in <i>Erwinia stewartii</i> require induction by an N-acyl homoserine lactone autoinducer," J. Bacteriol. 177:5000-5008, 1995.	
AE	AE	CAO et al., "Purification and structural identification of an autoinducer for the luminescence system of <i>Vibrio harveyi</i> ," J. Biol. Chem. 264:21670-21676, 1989.	
Examiner Signature	Iqbal Chowdhury		Date Considered 10/4/05

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AK	AF	CHA et al., "Production of acyl-homoserine lactone quorum-sensing signals by gram-negative plant-associated bacteria," <i>Mol. Plant Microbe Interact.</i> 11:1119-1129, 1998.	
AK	AG	COSTA et al., "Ecbl and EcbR: homologs of LuxI and LuxR affecting antibiotic and exoenzyme production by <i>Erwinia carotovora</i> subsp. <i>Betavascularum</i> ," <i>Can. J. Microbiol.</i> 43:1164-1171, 1997.	
AK	AH	DAUMY et al., "Role of protein subunits in <i>Proteus rettgeri</i> penicillin G acylase," <i>J. Bacteriol.</i> 163:1279-1281, 1985.	
AK	AI	DAVIES et al., "The involvement of cell-to-cell signals in the development of a bacterial biofilm," <i>Science</i> 280:295-298, 1998.	
AK	AJ	DONG et al., "AiiA, an enzyme that inactivates the acyl homoserine lactone quorum-sensing signal and attenuates the virulence of <i>Erwinia carotovora</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 97:3526-3531, 2000.	
AK	AK	DONG et al., "Quenching quorum sensing-dependent bacterial infection by an N-acyl homoserine lactonase," <i>Nature</i> 411:813-817, 2001.	
AK	AL	DUMENYO et al., "Genetic and physiological evidence for the production of N-acyl homoserine lactones by <i>Pseudomonas syringae</i> pv. <i>syringae</i> and other fluorescent plant pathogenic <i>Pseudomonas</i> species," <i>Eur. J. Plant Pathol.</i> 104:569-582, 1998.	
AK	AM	DUNPHY et al., "A homoserine lactone autoinducer regulates virulence of an insect-pathogenic bacterium, <i>Xenorhabdus nematophilus</i> (Enterobacteriaceae), <i>J. Bacteriol.</i> 179:5288-5291, 1997.	
AK	AN	EBERHARD et al., "Structural identification of autoinducer of <i>Photobacterium fischeri</i> luciferase," <i>Biochemistry</i> 20:2444-2449, 1981.	
AK	AO	EBERL et al., "Involvement of N-acyl-L-homoserine lactone autoinducers in controlling the multicellular behaviour of <i>Serratia liquefaciens</i> ," <i>Mol. Microbiol.</i> 20:127-136, 1996.	
Examiner Signature			Date Considered 12/4/05

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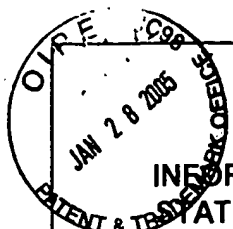
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R	AP	FUQUA et al., "Conserved cis-acting promoter elements are required for density-dependent transcription of <i>Agrobacterium tumefaciens</i> conjugal transfer genes," <i>J. Bacteriol.</i> 178:435-440, 1996.	
R	AQ	INOKOSHI et al., "Cloning and sequencing of the aculeacin A acylase-encoding gene from <i>Actinoplanes utahensis</i> and expression in <i>Streptomyces lividans</i> ," <i>Gene</i> 119:29-35, 1992.	
R	AR	JONES et al., "The Lux autoinducer regulates the production of exoenzyme virulence determinants in <i>Erwinia carotovora</i> and <i>Pseudomonas aeruginosa</i> ," <i>EMBO J.</i> 12:2477-2482, 1993.	
R	AS	LEADBETTER et al., "Metabolism of acyl-homoserine lactone quorum sensing signals by <i>Variovorax paradoxus</i> ," <i>J. Bacteriol.</i> 182:6921-6926, 2000.	
R	AT	LEADBETTER, J.R., "Quieting the raucous crowd," <i>Nature</i> 411:748-749, 2001.	
R	AU	LEWENZA et al., "Quorum sensing in <i>Burkholderia cepacia</i> : identification of the LuxRI homologs CepRI," <i>J. Bacteriol.</i> 181:748-756, 1999.	
R	AV	MATSUDA et al., "Molecular cloning and structure of the gene for 7β-(4-carboxybutanamido) cephalosporadic acid acylase from a <i>Pseudomonas</i> strain," <i>J. Bacteriol.</i> 163:1222-1228, 1985.	
R	AW	MATSUDA et al., "Nucleotide sequence of the genes for two distinct cephalosporin acylases from a <i>Pseudomonas</i> strain," <i>J. Bacteriol.</i> 169:5821-5826, 1987.	
R	AX	NASSER et al., "Characterization of the <i>Erwinia chrysanthemi</i> <i>expl-expR</i> locus directing the synthesis of two N-acyl-homoserine lactone signal molecules," <i>Mol. Microbiol.</i> 29:1391-1405, 1998.	
R	AY	PASSADOR et al., "Expression of <i>Pseudomonas aeruginosa</i> virulence genes requires cell-to-cell communication," <i>Science</i> 260:1127-1130, 1993.	
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h	AZ	PEARSON et al., "Structure of the autoinducer required for expression of <i>Pseudomonas aeruginosa</i> virulence genes," Proc. Natl. Acad. Sci. USA 91:197-201, 1994.		
h	BA	PIPER et al., "Conjugation factor of <i>Agrobacterium tumefaciens</i> regulates Ti plasmid transfer by autoinduction," <i>Nature</i> 362:448-450, 1993.		
h	BB	PIRHONEN et al., "A small diffusible signal molecule is responsible for the global control of virulence and exoenzyme production in the plant pathogen <i>Erwinia carotovora</i> ," <i>EMBO J.</i> 12:2467-2476, 1993.		
h	BC	SCHUMACHER et al., "Penicillin acylase from <i>E. Coli</i> : unique gene-protein relation," <i>Nucleic Acids Res.</i> 14:5713-5727, 1986.		
h	BD	STASKAWICZ et al., "Molecular characterization of cloned avirulence genes from race 0 and race 1 of <i>Pseudomonas syringae</i> pv. <i>Glycinea</i> ," <i>J. Bacteriol.</i> 169:5789-5794, 1987.		
h	BE	TAKESHIMA et al., "A deacylation enzyme for aculeacin A, a neutral lipopeptide antibiotic, from <i>Actinoplanes utahensis</i> : purification and characterization," <i>J. Biochem.</i> 105:606-610, 1989.		
h	BF	VERHAERT et al., "Molecular cloning and analysis of the gene encoding the thermostable penicillin G acylase from <i>Alcaligenes faecalis</i> ," <i>Appl. Env. Microbiol.</i> 63:3412-3418, 1997.		
h	BG	WHITE et al., "Genome Sequence of the Radioresistant Bacterium <i>Deinococcus Radiodurans</i> R1," <i>Science</i> 286:1571-1577, 1999.		
h	BH	ZHANG et al., "Agrobacterium conjugation and gene regulation by N-acyl-L-homoserine lactones," <i>Nature</i> 362:446-448, 1993.		
h	BI	Swiss-Prot. Accession Q9RYQ4, WHITE et al., (two pages) (1999).		
h	BJ	EmBL Accession AE001836, WHITE et al., (ninety pages) (1999).		
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